U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705

Exhibit C

OBJECTIVE DESCRIPTION OF VARIETY
Wheat (*Triticum* spp.)

NAME OF APPLICANT (S)	TEMPORARY OR EXPERIMENTAL DESIGNATION	VARIETY NAME

ADDRESS *(Street and No. or RD No., City, State, Zip Code and Country)*	FOR OFFICIAL USE ONLY
	PVPO NUMBER

PLEASE READ ALL INSTRUCTIONS CAREFULLY:

Place the appropriate number that describes the varietal character of this variety in the boxes below. Place a zero in the first box (e.g., 0 9 9 or 0 9) when number is either 99 or less or 9 or less respectively. Data for quantitative plant characters should be based on a minimum of 100 plants. Comparative data should be determined from varieties entered in the same trial. Royal Horticultural Society or any recognized color standard may be used to determine plant colors; designate system used: _____. Please answer all questions for your variety; lack of response may delay progress of your application.

1. KIND:

☐ 1 = Common
2 = Durum
3 = Club
4 = Other (Specify) _____

2. VERNALIZATION:

☐ 1 = Spring
2 = Winter
3 = Other (Specify) _____

3. COLEOPTILE ANTHOCYANIN:

☐ 1 = Absent 2 = Present

4. JUVENILE PLANT GROWTH:

☐ 1 = Prostrate 2 = Semi-Erect 3 = Erect

5. PLANT COLOR: (boot stage)

☐ 1 = Yellow-Green
2 = Green
3 = Blue-Green

6. FLAG LEAF: (boot stage)

☐ 1 = Erect 2 = Recurved

☐ 1 = Not Twisted 2 = Twisted

☐ 1 = Wax Absent 2 = Wax Present

7. EAR EMERGENCE:

☐☐☐ Number of Days (Average)

☐☐ Number of Days Earlier Than * _____

Same As * _____

☐☐ Number of Days Later Than * _____

*Relative to a Commercial Variety Grown in the Same Trial

8. ANTHER COLOR:

☐ 1 = Yellow 2 = Purple

9. PLANT HEIGHT: (from soil to top of head, excluding awns)

☐☐☐ cm (Average)

☐☐ cm Taller Than _____ *

Same As _____ *

☐☐ cm Shorter Than _____ *

10. STEM:

A. ANTHOCYANIN

☐ 1 = Absent 2 = Present

B. WAXY BLOOM

☐ 1 = Absent 2 = Present

C. HAIRINESS (last internode of rachis)

☐ 1 = Absent 2 = Present

D. INTERNODE

☐ 1 = Hollow 2 = Semi-Solid 3 = Solid

☐ Number of Nodes

E. PEDUNCLE

☐ 1 = Erect 2 = Recurved 3 = Semi-Erect

☐☐ cm Length

F. AURICLE

☐ Anthocyanin 1 = Absent 2 = Present

☐ Hair: 1 = Absent 2 = Present

11. HEAD: (at maturity)

A. DENSITY

☐
1 = Lax
2 = Mid-dense (Laxidense)
3 = Dense

B. SHAPE

☐
1 = Tapering
2 = Strap
3 = Clavate
4 = Other (Specify) _____

C. CURVATURE

☐
1 = Erect
2 = Inclined
3 = Recurved

D. AWNEDNESS

☐
1 = Awnless
2 = Apically Awnletted
3 = Awnletted
4 = Awned

12. GLUMES: (at maturity)

A. COLOR

☐
1 = White
2 = Tan
3 = Other (Specify) _____

B. SHOULDER

☐
1 = Wanting 2 = Oblique
3 = Rounded 4 = Square
5 = Elevated 6 = Apiculate
7 = Other (Specify) _____

C. SHOULDER WIDTH

☐
1 = Narrow
2 = Medium
3 = Wide

D. BEAK

☐
1 = Obtuse
2 = Acute
3 = Acuminate

E. BEAK WIDTH

☐
1 = Narrow
2 = Medium
3 = Wide

F. GLUME LENGTH

☐
1 = Short (ca. 7mm)
2 = Medium (ca. 8mm)
3 = Long (ca. 9mm)

G. WIDTH

☐
1 = Narrow (ca. 3mm)
2 = Medium (ca. 3.5mm)
3 = Long (ca. 4mm)

13. SEED:

A. SHAPE

☐ 1 = Ovate
2 = Oval
3 = Elliptical

B. CHEEK

☐ 1 = Rounded
2 = Angular

C. BRUSH

☐ 1 = Short
2 = Medium
3 = Long

☐ 1 = Not Collared
2 = Collared

D. CREASE

☐ 1 = Width 60% or less of Kernel
2 = Width 80% or less of Kernel
3 = Width Nearly as Wide as Kernel

☐ 1 = Depth 20% or less of Kernel
2 = Depth 35% or less of Kernel
3 = Depth 50% or less of Kernel

E. COLOR

☐ 1 = White
2 = Amber
3 = Red
4 = Other (Specify) _____

F. TEXTURE

☐ 1 = Hard
2 = Soft
3 = Other (Specify) _____

G. PHENOL REACTION

☐ 1 = Ivory
2 = Fawn
3 = Light- Brown
4 = Dark- Brown
5 = Black

H. SEED WEIGHT

☐☐ g/1000 Seed (whole number only)

I. GERM SIZE

☐ 1 = Small
2 = Mid-Size
3 = Large

14. DISEASE: (0 = Not Tested 1 = Susceptible 2 = Resistant 3 = Intermediate 4 = Tolerant)

PLEASE INDICATE THE SPECIFIC RACE OR STRAIN TESTED

☐ Stem Rust (*Puccinia graminis* f. sp. *tritici*)
☐ Stripe Rust (*Puccinia striiformis*)
☐ Tan Spot (*Pyrenophora tritici-repentis*)
☐ Halo Spot (*Selenophoma donacis*)
☐ *Septoria nodorum* (Glume Blotch)
☐ *Septoria avenae* (Speckled Leaf Disease)
☐ *Septoria tritici* (Speckled Leaf Blotch)
☐ Scab (*Fusarium* spp.)
☐ "Black Point" (Kernel Smudge)
☐ Barley Yellow Dwarf Virus (BYDV)
☐ Soilborne Mosaic Virus (SBMV)
☐ Wheat Yellow (Spindle Streak) Mosaic Virus
☐ Wheat Streak Mosaic Virus (WSMV)
☐ Other (Specify) _____
☐ Other (Specify) _____
☐ Other (Specify) _____

☐ Leaf Rust (*Puccinia recondita* f. sp. *tritici*)
☐ Loose Smut (*Ustilago tritici*)
☐ Flag Smut (*Urocystis agropyri*)
☐ Common Bunt (*Tilletia tritici* or T. *laevis*)
☐ Dwarf Bunt (*Tilletia controversa*)
☐ Karnal Bunt (*Tilletia indica*)
☐ Powdery Mildew (*Ersiphe graminis* f. sp. *tritici*)
☐ "Snow Molds"
☐ Common Root Rot (*Fusarium*, *Cochliobolus* and *Bipolaris* spp.)
☐ Rhizoctonia Root Rot (*Rhizoctonia solani*)
☐ Black Chaff (*Xanthomonas campestris* pv. *translucens*)
☐ Bacterial Leaf Blight (*Pseudomonas syringae* pv. *syringae*)
☐ Other (Specify) _____
☐ Other (Specify) _____
☐ Other (Specify) _____
☐ Other (Specify) _____

15. INSECT: (0 = Not Tested 1 = Susceptible 2 = Resistant 3 = Intermediate 4 = Tolerant)

PLEASE SPECIFY BIOTYPE (where needed)

☐ Hessian Fly (*Mayetiola destructor*)
☐ Stem Sawfly (C*ephus* spp.)
☐ Cereal Leaf Beetle (*Oulema melanopa*)

☐ Other (Specify) _____
☐ Other (Specify) _____
☐ Other (Specify) _____

15. INSECT: (continued) 0 = Not Tested 1 = Susceptible 2 = Resistant 3 = Intermediate 4 = Tolerant

PLEASE SPECIFY BIOTYPE (Where Needed)

- ☐ Russian Aphid (*Diuraphis noxia*)
- ☐ Greenbug (*Schizaphis graminum*)
- ☐ Aphids
- ☐ Other (Specify) _____
- ☐ Other (Specify) _____
- ☐ Other (Specify) _____

16. ADDITIONAL INFORMATION ON ANY ITEM ABOVE, OR GENERAL COMMENTS:

WHEAT DESCRIPTOR ILLUSTRATIONS

Section Numbers Correspond to the Numbers of the Sections on the Form

4. EARLY PLANT GROWTH HABIT:

1 Prostrate | 2 Intermediate | 3 Erect

10. STEM INTERNODE X-SECTION:

1 Hollow | 2 Semi-Solid | 3 Solid

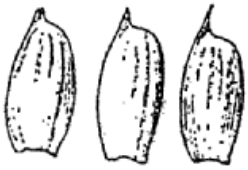
11. SPIKE SHAPE:

1 Tapering | 2 Oblong | 3 Clavate | 4 Elliptical

11. AWNEDNESS:

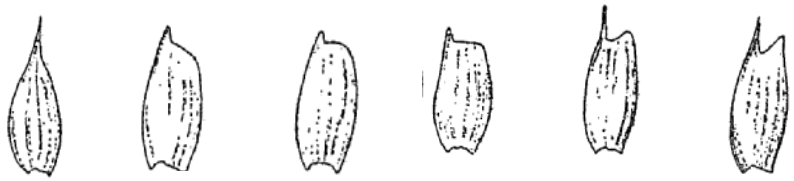
1 Awnless | 2 Apically Awnleted | 3 Awnleted | 4 Awned

12. BEAK SHAPE:



1 Obtuse | 2 Acute | 3 Acuminate

12. SHOULDER SHAPE:

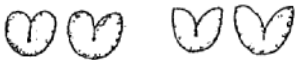


1 Wanting | 2 Oblique | 3 Rounded | 4 Square | 5 Elevated | 6 Apiculate

13. SEED SHAPE:

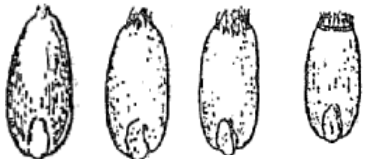
1 Ovate | 2 Oval | 3 Elliptical

13. CHEEK SHAPE:



1 Rounded | 2 AngulaR

13. BRUSH SIZE



1 Small | 2 Mid-Sized | 3 Large | 4 Collared

13. BRUSH HAIR LENGTH:

1 Short | 2 Medium | 3 Long

13. GERM (EMBRYO) SIZE:

1 Small | 2 Mid-Sized | 3 Large

13. SEED CREASE WIDTH:

1 Narrow | 2 Mid-Wide | 3 Wide

13. SEED CREASE DEPTH:

1 Shallow | 2 Mid-Deep | 3 Deep